dadss
Driver Alcohol Detection System for Safety

Fact Sheet

1. What is the Driver Alcohol Detection System for Safety (DADSS)?

One of the most important government and auto industry partnerships over the past few years, the DADSS is a five-year cooperative research program to develop in-vehicle technology aimed at preventing alcohol-impaired driving in the United States. The five-year, cost-sharing agreement between the National Highway Traffic Safety Administration and most of the world's auto makers involves cooperative research to develop technologies that will quickly and accurately measure a driver's blood alcohol concentration (BAC) in a non-invasive manner. If the system detects that a driver is drunk, the vehicle will be disabled from being driven. The DADSS technology must be seamless, accurate, reliable, and precise, and unobtrusive to the sober driver.

2. How might the technology work?

Two broad approaches are currently being pursued: Tissue spectrometry, a touch-based approach allowing estimation of alcohol in tissue through detection of light absorption; and distant spectrometry, using part of the infrared light spectrum to detect alcohol concentration in the driver's exhaled breath.

3. Who is involved in this program?

NHTSA and an industry coalition called the Automotive Coalition for Traffic Safety (ACTS) have jointly agreed to work together in collaborative research to develop the DADSS technology. ACTS is a nonprofit organization wholly funded by the world's leading auto makers, including BMW, Chrysler, Ford, General Motors, Honda, Hyundai/Kia, Jaguar Land Rover, Mazda, Mercedes-Benz, Mitsubishi, Nissan, Porsche, Toyota, Volkswagen, and Volvo.

4. When did it start and how much funding is involved?

In February 2008 NHTSA initiated the five-year, $10 million cooperative effort, with the cost split between NHTSA and the auto industry's ACTS coalition. Phase I of the program, a proof-of-concept stage, has just been completed and the results of this research are being demonstrated to the public today at the DADSS lab in Waltham, Massachusetts. Phase II of the program will begin in February and will last for approximately two years. Phase II will involve a practical demonstration of one or more of the alcohol detection subsystems suitable for continued development and subsequent installation in vehicles.

5. When do you expect DADSS to be in U.S. automobiles?

The DADSS research is still in the early stages and it is premature to discuss when the technology will be available for general use, although we've heard from the auto industry that it is reasonable to expect that it could begin to be integrated into vehicles in approximately 8 to 10 years.

6. Will DADSS be in every new car and light truck?

The goal over time is to equip all passenger vehicles in the United States with the technology, since without full implementation the benefits will be reduced. But as with any new technology introduction it will take additional time before it is available throughout the vehicle fleet.

7. How much will DADSS add to the price of a new vehicle?

The cost per vehicle hasn't yet been established, but has to be in line with other safety systems. As with any new technology, as more and more vehicles are equipped with the system, the price will decrease. Air bags are one example of this.

8. Will I be able to drive my car if I have just one drink, or a glass of wine, with my dinner?

The DADSS threshold has been set at .08 grams per deciliter BAC, which is the legal limit enacted in all States. The DADSS technology is not intended to prevent anyone from having a glass of wine or an alcoholic beverage for dinner. The amount of alcohol a person can consume before reaching the legal limit varies based on a person's weight and body chemistry, food being consumed, and how fast the person is drinking, among many other factors.

For more information about DADSS, click on this link: www.dadss.org.